

Chronic Disease Surveillance Report

Complementary and Alternative Medicine Use for Asthma

Introduction

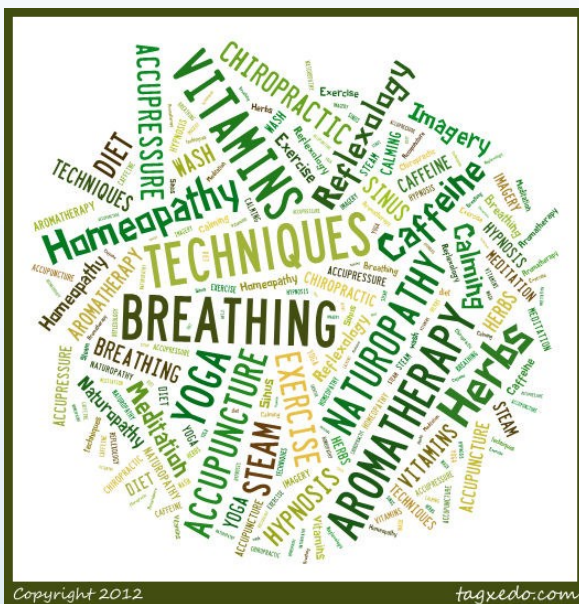
Complementary and alternative medicines (CAM) are defined as “a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine” by the National Center for Complementary and Alternative Medicine (NCCAM).¹ It can refer to natural products like dietary supplements and probiotics; mind and body medicine like meditation, yoga, or acupuncture; or manipulative and body-based practices like massage therapy or spinal manipulation. CAM also can include movement therapies like Pilates or Rolfing or manipulation of energy fields like using magnets or lights to affect health.

People with current asthma in Montana report using a variety of CAM to treat their asthma. Some of the responses provided are depicted in the word cloud (pictured on the left). This report describes the frequency of use and type of CAM used among people with asthma in Montana.

Survey methods

The Behavioral Risk Factor Surveillance System (BRFSS) are state-based surveys of noninstitutionalized adults aged 18 years and older who are asked about health risks and behaviors. For respondents with children, a child is randomly selected and the respondent is asked about the asthma status of the child. If respondents indicate that they or their child had or currently has asthma, they are asked to participate in the Asthma Call-Back Survey (ACBS). If they agree, they are called again and asked more in-depth questions about their experience with asthma and their use of specific asthma medications. A parent or guardian responds for children participating in the ACBS.

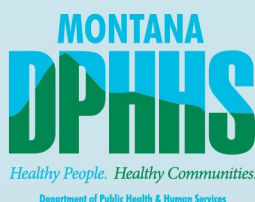
Current asthma refers to people who responded “yes” to “Has a health care provider ever told you that you have asthma?” and “Do you still have asthma?” CAM refers to a “yes” response to “Sometimes people use methods other than prescription medications to help treat or control their asthma. These methods are called non-traditional, complementary, or alternative healthcare. In the past 12 months, have you used [type of CAM] to control asthma?” Respondents were specifically asked about herbs, vitamins, acupuncture, acupressure, aromatherapy, homeopathy, reflexology, yoga, breathing techniques, and naturopathy. A follow up question on whether they have used anything else was also asked.



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Types of CAM

There is limited research on use of CAM in the US and the Expert Panel Review-3 (EPR-3) Guidelines for Asthma state “evidence is insufficient to recommend or not recommend most complementary and alternative medicines or treatments.”² Overall, 43% of adults and 23% of children with current asthma reported using some kind of CAM for their asthma (Figure 1). Figure 1 shows the frequency of types of CAM mentioned for adults and children with asthma in Montana.

Breathing techniques: These techniques include inspiratory muscle training and Buteyko breathing (raising the partial pressure of carbon dioxide in the blood through hypoventilation). One third of adults and 14% of children with asthma in Montana mentioned using breathing techniques for their asthma.

Vitamins: Vitamin use includes consuming vitamins or provitamins in addition to food eaten to treat asthma. Ten percent of adults and 7% of children with asthma reported using vitamins for their asthma.

Herbs: This category includes the use of plants and plant extracts to treat asthma. Nine percent of adults and 3% of children reported using herbs to treat their asthma. The EPR-3 Guidelines caution that herbal products are not standardized and therefore patients must be aware that some herbal treatments may have harmful ingredients and/or may interact with other pharmaceutical products.

Aromatherapy: This practice uses volatile plant materials to alter health, moods, or cognitive function. Very little research has been conducted to determine if aromatherapy is beneficial for asthma. Five percent of adults and 2% of children with asthma reported using aromatherapy.

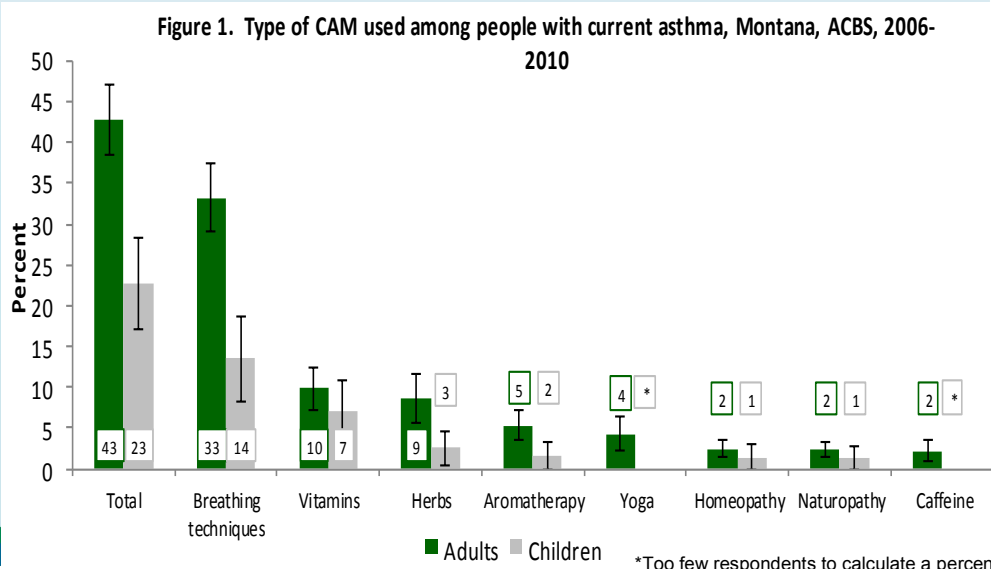
Yoga: This form of exercise includes a series of set postures to promote control of the mind and body. Four percent of adults reported using yoga to treat their asthma.

Homeopathy: This category of therapies is based on the theory that “like cures like.”³ Remedies are usually a diluted form of a substance that would cause similar symptoms as the illness if used undiluted. Two percent of adults and 1% of children with asthma reported using homeopathy.

Naturopathy: This category of treatment tends to be holistic and non-invasive and avoids surgery and medications. Two percent of adults and one percent of children reported using naturopathy to treat their asthma.

Caffeine: Caffeine may modestly improve airway functioning for up to four hours.⁴ Caffeine use within four hours of lung function testing may lead to misinterpretation of results. Two percent of adults in Montana reported using caffeine to treat their asthma.

GUIDELINES²
RECOMMEND ASKING
PATIENTS ABOUT ALL
MEDICATIONS AND
TREATMENTS THEY ARE
USING FOR ASTHMA AND
TO ADVISE PATIENTS
THAT CAM IS NOT A
SUBSTITUTE FOR THE
CLINICIANS’
RECOMMENDATIONS FOR
ASTHMA TREATMENT



Other Types of CAM Mentioned Very Infrequently by Respondents

Acupuncture and acupressure: Acupuncture refers to inserting thin needles at certain points on the body. The EPR-3 Guidelines do not recommend the use of acupuncture for the treatment of asthma. Acupressure is closely related to acupuncture and involves applying physical pressure to certain points on the body.

Chiropractic: This category of treatment involves spinal or body manipulation or massage. The EPR-3 Guidelines conclude there is insufficient evidence to recommend the use of chiropractic or related techniques for asthma.

Relaxation techniques: This category includes imagery, muscle relaxation, hypnosis, and meditation. The EPR-3 Guidelines state “there is some encouraging data from small studies,” but more data from larger controlled studies would be needed to allow a recommendation to use relaxation techniques for the treatment of asthma.

Among adults with asthma, who uses CAM?

Reported use of CAM was more frequent among females than among males (Figure 2). There were no differences in the frequency of CAM use reported among age groups, educational levels or household income levels.

Asthma Health Outcomes

Reported use of CAM was not associated with better asthma health outcomes among adults with current asthma. Adults who used CAM reported limiting their activities due to asthma, awakening at night due to asthma, and missing work due to asthma more frequently than did adults with asthma who did not use any CAM (Figure 3). There was no reported difference in the frequency of visiting an Emergency Department between CAM users and non-CAM users. After adjusting for sex, the associations between CAM use and limiting activities, sleep awakenings, and missing work remained (data not shown). It is possible that persons with asthma who are experiencing adverse outcomes are more likely than those who are not to use CAM to try to control otherwise inadequately controlled asthma.

Note to our readers: If you would no longer like to receive this report or if you would like to receive it electronically, please email jfernandes@mt.gov or call 406-444-9155 to make your request.

References

1. <http://nccam.nih.gov/health/whatisacam>
2. National Heart Lung and Blood Institute (US). Expert Panel Review-3 Guidelines to Asthma Management. National Institutes of Health (US); 2007 Aug. NIH Pub. Available at: <http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.pdf>
3. <http://nccam.nih.gov/health/homeopathy>
4. Welsh EJ, Bara A, Barley E, Cates CJ. Caffeine for asthma. Cochrane Database Syst Rev. 2010 Jan 20;(1):CD001112.

Figure 2. Percent of CAM use among adults with current asthma by characteristic, Montana, ACBS, 2006-2010

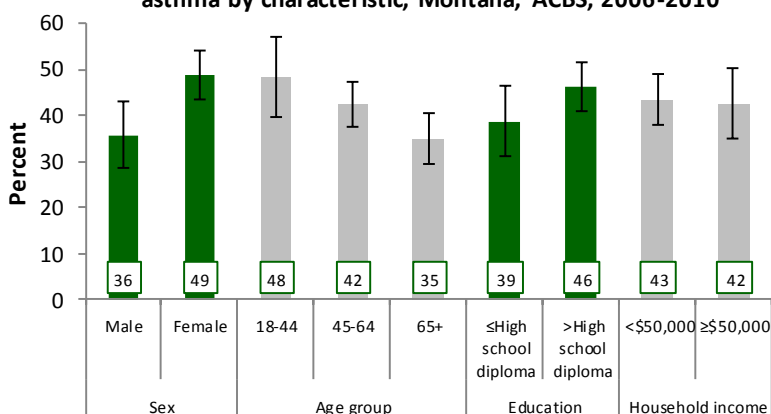
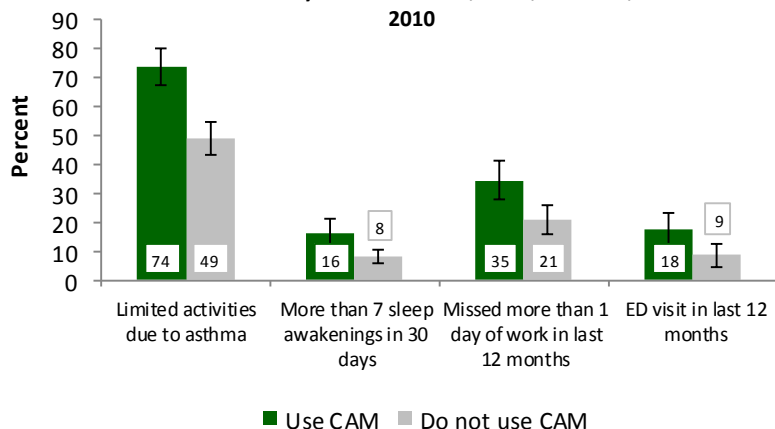


Figure 3. Percent of adults with current asthma with poor health outcomes by CAM use status, ACBS, Montana, 2006-2010



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Clinical Recommendations

- Ask asthma patients about all medications they are taking including complementary or alternative medicines or therapies.
- Evidence is insufficient to recommend or not recommend most complementary and alternative medicines or treatments for asthma.
- Caution patients that some herbal therapies may interact with other pharmaceutical therapies or contain harmful ingredients.
- Acupuncture is specifically not recommended for treating asthma.

Report Highlights: Complementary and Alternative Medicine Use for Asthma

- Many Montana adults and children with asthma report using complementary or alternative medicines (CAM) to treat their asthma.
- The most commonly reported CAM used were breathing techniques.
- Adults with asthma who used CAM did not report better asthma health outcomes than adults with asthma who did not use CAM.